Arenaria paludicola Robins.

swamp sandwort
Caryophyllaceae (Pink Family)

Status: State Potentially Extirpated, USFWS Endangered Species
Rank: G1SX

General Description: Adapted from Hitchcock et al. (1964): This hairless perennial has trailing, rooting, and shining flaccid stems that are up to 21 in. (70 cm) long. The leaves are linear to linear-lanceolate, ¾ to 2 in. (2 to 5 cm) long, 1/16 to ¼ in. (2 to 5 mm) broad, thin, and rough-margined. The white flowers are solitary in the axils of scarcely reduced leaves. The pedicels are ¾ to 2 in. (2 to 5 cm) long. The sepals are 1/8 in. (3 to 4 mm) long, lanceolate, acute, and indistinctly netted-veined. The petals are oblong and from ½ to twice as long as the calyx. The filaments are connate at the extreme base. There are 3 styles. The capsule is spherical/rounded-ovoid, barely equaling the sepals, and 3-valved. The seeds are about 1/32 in. (0.8 mm) long, plump, blackish, smooth and shiny.

Identification Tips: *Arenaria paludicola* is most closely related to *A. lateriflora* and *A. macrophylla*. Although these three species are generally found in different habitats (*A. paludicola* in wetlands and *A. lateriflora* and *A. macrophylla* in moist to dry woods), there can be overlap in wet areas. These species can be distinguished by their stems. The stems of *A. paludicola* are flaccid, 1/32 to 1/16 in. (1 to 2 mm) thick, and hairless. The stems of *A. lateriflora* and *A. macrophylla* are firm, less than 1/32 in. (1 mm) thick, rough, and minutely pubescent. *A. paludicola* is frequently confused with cleavers (*Galium aparine)*, but the leaves of *G. aparine* are whorled, while those of *A. paludicola* are opposite.

Phenology: This species flowers from May to August.

Range: This species was historically known from Pierce County, Washington, and from San Francisco, Santa Cruz, San Luis Obispo, and San Bernardino Counties, California. There are no known extant populations in Washington, and it is thought that eight of the nine known California occurrences have gone extinct. Worldwide distribution of this species is limited to one small population in San Luis Obispo County, California.

Habitat: *Arenaria paludicola* prefers swamps, mostly along the coast, and grows mainly in wetlands and freshwater marshes in a Mediterranean climate. This species is seen from sea level to 1476 ft (450 m), and can grow in saturated acidic bog soils and sandy substrates with high organic content.

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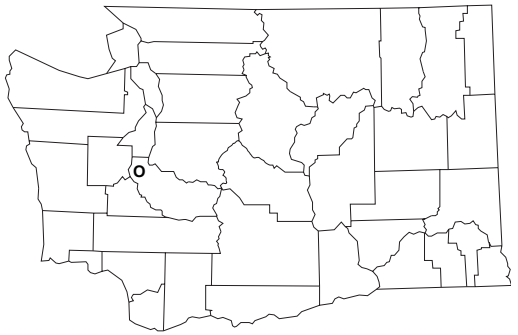
Known distribution of
Arenaria paludicola
in Washington



● Current (1980+)
○ Historic (older than 1980)

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Photo by Malcolm McLeod


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Ecology: Plants have been found in areas with shallow standing water and with no standing water and growing in saturated, acidic, organic bog soils. Plants are mostly spread and propagated by stem cuttings, and botanic gardens in California have grown and transplanted plants that were propagated by stem cuttings.

State Status Comments: There are no known extant populations in Washington state. There are several unverified historic observations (all from western Washington) and one verified historic collection from "swamps near Tacoma".

Inventory Needs: Inventory efforts should be continued, particularly within wetlands in the greater Tacoma area and in the coastal portions of the state.

Threats and Management Concerns: Major threats to this species in the extant portion of its range include changes in hydrology from well drilling, water uptake by other species, drought, invasion of non-native species, competition, urban and agricultural development, and off-road vehicle use.

References:

Gamon, J. 1991. Report on the Status of *Arenaria paludicola* Robinson. Washington Natural Heritage Program. Department of Natural Resources. Olympia, Washington.

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Kennison, J.A. 1980. Unpublished Report on *Arenaria paludicola*. Department of Natural Resources. Natural Heritage Program.

Morey, S.A. 1989. Report to the Fish and Game Commission on the status of marsh sandwort (*Arenaria paludicola*). Unpublished paper. State of California, The Resources Agency, Department of Fish and Game. Natural Heritage Division.

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